

AMENDMENTS IN THE CLAIMS:

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1. (currently amended) A recombinant adenovirus that mediates enhanced gene transfer to primary tumor cells, wherein said adenovirus comprises a fiber gene modified by introducing a ligand comprising a tripeptide having the sequence Arg-Gly-Asp (RGD) into the HI loop domain of the fiber knob, wherein said fiber knob and said fiber gene are from the same serotype.

2. (previously amended) The recombinant adenovirus of claim 1, wherein said adenovirus can achieve coxsackievirus and adenovirus receptor-independent gene transfer.

3. (original) The recombinant adenovirus of claim 1, wherein said adenovirus further comprises an additional modification to said fiber knob, thereby ablating the native tropism of said adenovirus.

4. (original) The recombinant adenovirus of claim 1, wherein said modified fiber knob retains its ability to trimerize and retains its native biosynthesis profile.

5-8. (canceled)

D\ 9. (previously amended) The recombinant adenovirus of claim 1, wherein the adenoviral vector encoding said adenovirus further comprises a herpes simplex virus-thymidine kinase gene.

10. (canceled)

11. (currently amended) A method of killing tumor cells in an individual ~~in need of such treatment~~, comprising the steps of:
~~administering to said individual~~ injecting an effective amount of the recombinant adenovirus of claim 9 to the tumor in said individual; and
treating said individual with ganciclovir.

12-15. (canceled)

16. (currently amended) A method of increasing the ability of an adenovirus to transduce primary tumor cells in vitro or ex vivo, comprising the steps of:

modifying the fiber gene of said adenovirus by introducing a ligand comprising a tripeptide having the sequence Arg-Gly-Asp (RGD) into the HI loop domain of the fiber knob; and

21 transducing said primary tumor cells with said adenovirus, wherein said transduction results in enhanced gene transfer to said tumor cells.

17-21. (canceled)

22. (previously amended) The method of claim 16, wherein said tumor cell is selected from the group consisting of cancer ascite samples and primary tumor explants.

23. (original) The method of claim 16, wherein the adenoviral vector encoding said adenovirus further comprises a therapeutic gene.
